ANPS 019

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FOREARM FLEXOR MUSCLE GROUPS

Superficial layer: closest to the skin, works on the wrist

Pronator teres muscle

Flexor carpis radialis

Palmaris longus

Flexor carpir ulnaris

Deep layer: underneath carpal tunnel and connect to phalanges

Flexor digitorum superficialis

Flexor digitorum profundus

Pronator quadartus

And more...

Brachioradialis: flexion at elbow joint

Flexor group of forearm – flex of wrist and fingers

Muscles of the anterior group in the forearm (left side)

HAND MUSCLE GROUPS

Hypothenar muscle group: (pinky side of hand)

Abductor digiti minimi

Flexor digiti minimi

Opponens digiti minimi

Thenar muscle group: thumb side

Abductor pollicis brevis

Flexor pollics brevis

Opponens pollicis

ARM/FOREARM MUSCLE EXTENSOR GROUP

Posterior compartment of arm

Extensor group of forearm—extends wrist and fingers

Open hand: extension

Close hand: flexion

Spaced fingers: abduction

Tight fingers: adduction

Muscles:

Extensor carpi radialis longus and brevis

Extensor pollicis longus and brevis

Extensor digitorum

Extensor carpi ulnaris

And more…

There are about 18 to 20 muscles in the forearm

Triceps: extends forearm at elbow joint

NERVE SUPPLY TO THE UPPER EXTREMITY

Nerves C4-T1 control the upper limb

BRACHIAL PLEXUS –TERMINAL NERVES

1. Musculocutaneous nerve – arm flexors
2. Median nerve – forearm flexors and thenar muscle
3. Ulnar nerve – some forearm flexors and most hand muscles; passes behind elbow to the hypothenar muscle group
4. Radial nerve – extensor muscle in arm and forearm to the thenar muscle group

THORACIC AND ABDOMINAL WALL MUSCLES

Intercostal muscles: present between ribs, in a layer of 3

--raises ribs a little to help us breath

External intercostal: down and in

Inner intercostal: perpendicular to ext. intercostal

Innermost intercostal: perpendicular to inner intercostal

Abdominal muscles:

External oblique: down and in

Internal oblique: perpendicular to external oblique

Transversus abdominis

--more horizontal than it is perpendicular

Rectus abdominis muscle: sixpack

ANTERIOR THIGH AND HIP MUSCLES

Quadriceps (like Triceps of the arm):

1. Rectus femoris
2. Vastus intermedialis
3. Vastus lateralis
4. Vastus medialis

Sartoris: starts at ASIS and crosses over anterior thigh and attaches to medial head of the tibia

Psoas major

Iliacus

Adductor muscle group:

1. Pectineus muscle
2. Adductor brevis
3. Adductor longus
4. Adductor magnus

Graciais

LATERAL THIGH AND HIP MUSCLES

Iliotibial tract

Tensor fascia latae muscle (inserts in the iliotibial tract)

Gluteus maximus (inserts into iliotibial tract

POSTERIOR THIGH AND HIP MUSCLES

Superficial:

Gluteus maximus

Gracilis

Iliotibial tract

Deep:

Gluteus maximus

Gluteus medius and minimus

Biceps femoris (long and short head)

Semitendinosus

Semimembranosus

LATERAL THIGH AND HIP MUSCLE (ACTIONS)

Tensor fascia latae:

Abducts the thigh at the hip

Locks the knee (through the IT tract)

HIP FLEXOR MUSCLE (ACTION)

Psoas major

Iliacus

--both flex the thigh at the hip joint

KNEE EXTENSOR MUSCLES (ACTIONS)

ALL IN ANTERIOR COMPARTMENT

Quadriceps femoris:

Rectus femoris\*—crosses two joints!

Vastus lateralis

Vastus intermedius

Vastus medialis

Hip Flexors:

Rectus femoris\*

Sartorius\*--crosses two joints!

Knee Flexors:

Sartorius\*

External Hip rotator:

Sartorius\*

THIGH ADDCUTOR MUSCLE (ACTIONS)

For rapid side to side movement

Adduction of thigh at the hip joint

Medial compartment

Adductor magnus

Adductor longus

Adductor brevis

Pectineus

Gracilis

POSTERIOR THIGH MUSCLES (ACTIONS)

Gluteus maximus:

Most powerful extendor of the hip

Also laterally rotates the thigh at hip joint

Gluteus medium

(Gluteus minimus—deep)

Abducts thigh at hip joint

Medially rotates thigh

Hamstring muscles:

Extend hip joints—assists the gluteus maximus

Semitendinosus

Semimembranosus

Biceps femoris

ANTERIOR LEG MUSCLES (ACTIONS)

Anterior compartment: 3 muscles

Tibialis anterior muscle: dorsiflexion, foot inversion

Extensor digitorum longus muscle: extension of digits 2-5

Extensor Hallucis Longus: extensions of first digit (big toe)

LATERAL LEG MUSCLE (ACTIONS)

Lateral compartment -2 muscles

Fibularis longus

Fibularis brevis

Eversion and plantarflexion of the foot

POSTERIOR LEG MUSCLE (ACTIONS)

Superficial muscle work on tarsal/ankle

Posterior compartment:

Gastrocnemius (superficial)

Soleus (deep)

DEEP POSTERIOR LEG MUSCLE (ACTIONS)

Toe flexion, inversion and plantar flexion

Posterior compartment:

3 muscles:

Flexor digitorum longus

Tibialis posterior

Flexor hallucis longus

INNERVATION OF LOWER EXTREMITY

Femoral nerve: anterior thigh

Obturator nerve: medial thigh, adductor muscle

Sciatic nerve: posterior thigh, divides into two:

1. Tibial nerve (posterior compartment
2. Common fibular nerve (anterior/lateral compartments)